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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/539,800 | 06/20/2005 | Kurt Hausmann | HAUS3002/FJD | 4930 |
| 23364 7590 11/12/2008 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314-1176 | | | | |
| EXAMINER | | | | |
| MANOHARAN, VIRGINIA | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1797 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/539,800

Applicant(s)

HAUSMANN, KURT

Examiner

Virginia Manoharan

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-44 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 23-44 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 20 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-85/86)
Paper No(s)/Mail Date 08/16/05 & 11/09/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Upon reconsideration, the restriction requirement dated July 23, 2008 has been withdrawn. Claims 23-44 are pending.

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors, e.g., typographical, grammar, idiomatic, syntax and etc. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: The reference numeral 11 for "heater 11" referred to at page 4, first full paragraph is not shown (at least not clearly shown in Fig.1). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The disclosure is objected to because there is no mention of this application being a 371 of PCT /EP 03/13824 filed 12/06/03 in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a). The “or” as in “crude or clean” in claim 23 lines 5- 6 should be – and –?
- b). The claimed “in particular”; “preferably” and the numerously recited “can be” in the claims (not a positive recitation) all fail to ascertain the claimed invention with precision. See e.g., claims 23, 30-31, 35-36 and 41.
- c). Claim 30 depending on claim 31 provides for confusion. Also, the process of claim 30 is at odds with the device of claim 31.
- d). The inconsistent used of terminology in the claims is improper as it provides for ambiguity in the claims. For examples:
 - 1). “at least one evaporation device” in claim 31, line 3, as opposed to “at least one upstream evaporation device” in claim 31, line 6, and “ said evaporation device” in claim 31, lines 13-14.
 - 2). “at least one condensation device” in claim 1, line 5, as opposed to “said condensation device” in claim 31, line 12.

Claims 23 - 44 are objected to because of typographical error such as "vapour",
numerously recited in the claims which should be –vapor—as the latter is the term
normally used in the U.S.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-26 and 28-29 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Cheng et al (5,374,751) in view of Thurman (2,682,499).

Cheng discloses substantially the process and device as claimed. That is, Cheng discloses, inter alia, a process and apparatus comprising in combination of delivering a crude fluid via a pump (33) to a thermal heater (34) controlled by a valve (35). The preheated crude material is further treated in a deodorization tower (36) [deemed corresponding to the claimed evaporator]. The vapor produced is withdrawn and delivered to condensers (77, 78) and steam ejector (81) to recover a condensate. Cheng further discloses at col. 7, lines 65-67 the concept of "enlarging the sizes of the ejector to accommodate the large volumes of vapors" which concept would at least be suggestive of the claimed "subsequently..... a partial vacuum created by volume enlargement under hermetically sealed conditions" in claim 23; and further in claim 31 "having an operating chamber of variable size.... exposed to a partial vacuum in hermetically closed condition by enlarging the operating chamber of the pump of said

condensation device". The process and apparatus of Cheng differ from the claimed invention in that claim 23 recites "filling the evaporation device and the condensation device with crude or clean liquid, respectively, when they are disconnected"; and claim 31 recites "at least one evaporation device which can be supplied with crude liquid and in which a partial vacuum can be produced; at least one condensation device which can be supplied with vapour from said at least one upstream evaporation device via a connecting line". However, Thurman at col. 8, lines 29-35 discloses the above separate feeding for the crude and distillate (clean) conduits. To incorporate Thurman to the method of Cheng would have been obvious to one of ordinary skill in the art inasmuch as both are directed to similar processing environment, i.e., to a distillation process with a separate vacuum device for the evaporator and the condenser.

Claims 31-33 and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al (5,374,751) in view of Thurman (2,682,499) and Hauser (6,063,242).

Cheng and Thurman in combination are discussed supra.

The claimed "provision is made in said connecting line for a shut-off device releasing said connecting line only when the operating chambers of the pumps of said evaporating device and said condensing device are enlarged to maximum size" in claim 31 is deemed to be rendered obvious by the regulating valve (8) of Hauser in the connecting line between the evaporator (2) and condenser(11). See col.1, lines 37-48. To incorporate the regulating valve of Hauser to the device of Cheng would have been

obvious to one of ordinary skill in the art for the advantages taught e.g., at col. 3, lines 40-49, and col. 4, lines 18-26 of the Hauser's reference.

Claims 27, 30, 34-36 and 42-44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a). Lee shows a crude tank (15) to still (30) and distillate (74, 75) to a condenser device.
- b). Cox et al discloses a distillation control system.
- c). Katz et al and MacDermid both disclose a method and apparatus for high distillation of impure liquids.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Manoharan whose telephone number is (571) 272-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Virginia Manoharan/
Primary Examiner, Art Unit 1797